

- 20 -

Claims.

1.- Floor covering, of the type consisting of hard floor panels (2-3), which are manufactured of a plate material and which, at least at a number of sides (4-5-6-7; 8-9-10-11), are provided with coupling parts (12-13-14-15; 16-17-18-19), characterized in that the floor panels (2; 3) are configured such that, in joined condition, they represent a herringbone pattern, whereby the sides (4-5-6-7; 8-9-10-11) of the floor panels (2; 3) coincide with transition edges of the herringbone pattern.

2.- Floor covering according to any of the preceding claims, characterized in that the floor panels (2; 3) are provided with coupling parts (12-13-14-15; 16-17-18-19) on all sides (4-5-6-7; 8-9-10-11).

3.- Floor covering according to claim 1 or 2, characterized in that said panels (2-3) comprise coupling parts at one or more sides, which allow that these panels by these sides can be coupled to other panels by means of a downward movement, more particularly by means of a so-called dropping-in movement, thereby providing a locking in horizontal direction in coupled condition.

25

4.- Floor covering according to claim 2, characterized in that the coupling parts (12-13-14-15; 16-17-18-19) are configured such that they perform a locking in vertical as well as horizontal directions at all sides (4-5-6-7; 8-9-10-11) of the floor panels (2; 3).

30

- 21 -

5.- Floor covering according to any of the preceding claims, characterized in that it consists of at least two series of different floor panels (2; 3).

5 6.- Floor covering according to claim 5, characterized in that the floor panels (2) of one of said two series form those parts (28) of the herringbone pattern which extend in a first direction, whereas the floor panels (3) of the second series form the parts (28) of the herringbone  
10 pattern which extend in a second direction.

7.- Floor covering according to any of the preceding claims, characterized in that the floor panels (2; 3) are oblong and thus have short sides (6-7; 10-11) and long  
15 sides (4-5; 8-9) and that these floor panels (2; 3) in mounted condition are situated with their short sides against the long sides of adjacent floor panels (2; 3).

8.- Floor covering according to claims 6 and 7,  
20 characterized in that the floor panels (2; 3) of the first series as well as of the second series are provided at their opposed long sides (4-5; 8-9), with first coupling parts (12; 16) and second coupling parts (13; 17), respectively, whereas at their opposed short sides (6-7;  
25 10-11), they are provided with third and fourth coupling parts (14; 18; 15, 19); that the first and second coupling parts (12; 16; 13, 17) of the floor panels (2; 3) of the first series are complementary to each other; that the first and second coupling parts (12, 16; 13, 17) of the  
30 floor panels (2; 3) of the second series are complementary to each other; that the third and fourth coupling parts (14, 18; 15, 19) of the floor panels (2; 3) of the first

- 22 -

series are complementary to the second and the first coupling parts (13, 17; 12, 16), respectively, of the floor panels (2; 3) of the second series; and that the third and the fourth coupling parts (14, 18; 15, 19) of the floor panels (2; 3) of the second series are complementary to the first and second coupling parts (12, 16; 13, 17), respectively, of the first series.

9.- Floor covering according to claim 8, characterized in that the coupling parts (12-13-14-15; 16-17-18-19) at the floor panels (2; 3), starting from a long side, are arranged successively, seen from the upper side and in clockwise direction: first, fourth, second and third coupling parts (12-13-14-15; 16-17-18-19).

15

10.- Floor covering according to any of the claims 7 to 9, characterized in that the floor panels (2; 3) are rectangular.

20

11.- Floor covering according to any of the claims 7 to 9, characterized in that the floor panels (2; 3) have the shape of a parallelogram.

25

12.- Floor covering according to any of the claims 1 to 4, characterized in that the floor panels (2; 3) are realized in the shape of a parallelogram, whereby these floor panels (2; 3) extend in one direction in rows with parallel separation lines (26-27).

30

13.- Floor covering according to claim 12, characterized in that the floor panels (2; 3) are oblong.

- 23 -

14.- Floor covering according to claim 13, characterized in that the floor panels (2; 3) are situated with their short sides (6-7; 10-11) against said parallel separation lines (26-27).

5

15.- Floor covering according to any of the claims 12 to 14, characterized in that it comprises at least two series of different floor panels (2; 3), whereby the floor panels (2; 3) of one of said two series form the parts (28) of the herringbone pattern which extend in a first direction, 10 whereas the floor panels (2; 3) of the second series form the parts (28) of the herringbone pattern which extend in a second direction.

15 16.- Floor covering according to claim 15, characterized in that the floor panels (2; 3) of the first series as well as the second series are provided with first and second coupling parts (12, 16; 13, 17) at two opposed sides (4-5-6-7; 8-9-10-11), whereas at the other two sides 20 (12, 16; 13, 17), they are provided with third and fourth coupling parts (14, 18; 15, 19); that the first and second coupling parts (12, 16; 13, 17) of the floor panels (2; 3) of the first series are complementary to each other; that the first and second coupling parts (12, 16; 13, 17) of 25 the floor panels (2; 3) of the second series are complementary to each other; and that the third and fourth coupling parts (14, 18; 15, 19) of the floor panels (2; 3) of the first series are complementary to the fourth and the third coupling parts (15, 19; 14, 18), respectively, 30 of the second series.

- 24 -

17.- Floor covering according to claim 12, characterized in that the floor panels (2; 3) which are intended for forming the parts (28) which extend in one oblique direction of the herringbone pattern, as well as the floor  
5 panels (2; 3) which are intended for forming the parts (28) which extend in the other oblique direction of the herringbone pattern, are identical in respect to shape and coupling parts (12-13-14-15; 16-17-18-19), whereby they also have the shape of an equilateral parallelogram.

10

18.- Floor covering according to claim 5, characterized in that floor panels (2; 3) are applied each having a pair of opposed sides with coupling parts of a similar, non-complementary type.

15

19.- Floor covering according to claim 18, characterized in that the remaining pairs of opposed sides show complementary coupling parts.

20

20.- Floor covering according to claim 18 or 19, characterized in that the floor panels (2; 3) of each of both series, per series comprise coupling parts of the same type at three successive sides of the panels, whereby the coupling parts at said three successive sides  
25 of the panels of the first series are complementary to the coupling parts at the three successive sides of the panels of the second series.

30

21.- Floor covering according to any of claims 18 to 20, characterized in that the panels are rectangular and oblong and in that the opposite sides with the non-complementary coupling parts are formed by the long sides.

- 25 -

22.- Floor covering according to any of claims 18 to 20, characterized in that the panels are rectangular and oblong and in that the opposite sides with the non-  
5 complementary coupling parts are formed by the short sides.

23.- Floor covering according to any of the preceding claims, characterized in that each floor panel coincides  
10 with one part of the herringbone pattern.

24.- Floor covering according to any of the claims 1 to 22, characterized in that each floor panel coincides with a multiple of strip-shaped parts (28) of the herringbone  
15 pattern.

25.- Floor covering according to any of the claims 1 to 16 or 18 to 22, characterized in that the floor panels (2; 3) are realized as strip-shaped parts (28), wherein the  
20 longest sides (4-5; 8-9) of the floor panels (2; 3) are shorter than 50 cm, and both longest sides (4-5; 8-9) are situated at a distance from each other which is smaller than 15 cm.

25 26.- Floor covering according to any of the preceding claims, characterized in that the floor panels (2; 3) are provided with coupling parts (12-13-14-15; 16-17-18-19) which lock the floor panels (2; 3) free of play, preferably with a pretension.

30

27.- Floor covering according to any of the preceding claims, characterized in that the floor panels (2; 3) and

- 26 -

the coupling parts (12-13-14-15; 16-17-18-19) are realized of one piece, from one plate, whether of a multi-layered structure or not.

5 28.- Floor panel, characterized in that it is configured such that therewith, in combination with other floor panels (2; 3), whether having another shape or not, a floor covering according to any of the preceding claims can be realized.

10

29.- Method for laying panels, for realizing a floor covering according to claim 8, characterized in that the floor panels (2-3) of the respective series are installed row per row, more particularly by laying alternately a row  
15 of floor panels (2) of the first series in one direction (A) and a row of floor panels (3) of the second series in an opposite direction (B).

30.- Method for laying panels, for realizing a floor  
20 covering according to claim 22, characterized in that alternately complete herringbone patterns are realised with panels of the first series and with panels of the second series.

25 31.- Method for laying panels, for realizing a floor covering according to claim 21, characterized in that alternately zigzag rows are realized during laying, each zigzag row being systematically formed of panels belonging to only one series.

30

32.- Method for manufacturing panels, for realizing a floor covering in a herringbone pattern comprising two

- 27 -

series of panels (2-3), each pair of opposite sides of both panels being provided with complementary coupling parts, characterized in that the panels of both series are realized by means of the same cutting tools, whereby at least the following steps are applied:

- displacing the panels of both series along a first set of tools (32) for forming a first pair of complementary coupling parts at two opposite sides;
- displacing the panels of both series along a second set of tools (33) for forming the second pair of complementary coupling parts at the two remaining opposite sides;
- when transferring the panels (2) of the first series of panels from the first to the second set of tools, subjecting them to a rotation such that they finally end up in a rotational position in which they are turned in one direction; and
- when transferring the panels (3) of the second series of panels from the first to the second set of tools, subjecting them to a rotation such that they finally end up in a position in which they are turned in another direction than the panels of the first series.

33.- Method for manufacturing panels, for realizing a floor covering in a herringbone pattern comprising two series of panels (2-3), one pair of opposite sides of both panels being provided with complementary coupling parts, the other pair being provided with non-complementary coupling parts, characterized in that the coupling parts are realized by using three sets of tools, whereby a first



- 28 -

set of tools (34) is used for providing the panels (2-3) of both series with complementary coupling parts at one pair of opposite sides, whereby a second set of tools (35) is used for realizing non-complementary coupling parts at the remaining opposite sides of the panels (2) of the first series, and a third set of tools (36) is used for realizing non-complementary coupling parts at the remaining opposite sides of the panels (3) of the second series.

10

34.- Set of packaged floor panels, more particularly floor panels according to claim 28, for forming a herringbone pattern composed of at least two series of different panels (2, 3), characterized in that said panels are packaged such that each packaging comprises panels of both series.

15